

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



554030



(43) International Publication Date
4 November 2004 (04.11.2004)

PCT

(10) International Publication Number
WO 2004/094627 A1

(51) International Patent Classification⁷: C12N 5/06, 5/10

374-4 Wanggok-dong, Uiwang-si, Kyungki-do 437-020 (KR).

(21) International Application Number:

PCT/KR2004/000908

(22) International Filing Date: 21 April 2004 (21.04.2004)

(72) Inventors; and

(25) Filing Language:

English

(75) Inventors/Applicants (*for US only*): HAN, Jae Yong [KR/KR]; 17-308 Eunma Apartment, 316 Daechi-dong, Gangnam-gu, Seoul 135-280 (KR). PARK, Tae Sub [KR/KR]; 606-1106 Saetbyeol Apartment, Dalan-dong, Dongan-gu, Anyang-si, Kyungki-do 431-058 (KR). HONG, Yeong Ho [KR/KR]; 105-910 Woncheon Jugong Apartment, 35 Woncheon-dong, Paldal-gu, Suwon-si, Kyungki-do 442-821 (KR). KWON, Se Chang [KR/KR]; 802-2205 Hyundai Apartment, Kwangjang-dong, Kwangjin-gu, Seoul 143-210 (KR).

(26) Publication Language:

English

(74) Agent: SESHIN PATENT & LAW FIRM; 8th Fl., KFSB Bldg., 16-2 Yeodo-dong, Yeongdeungpo-gu, Seoul 150-010 (KR).

(30) Priority Data:

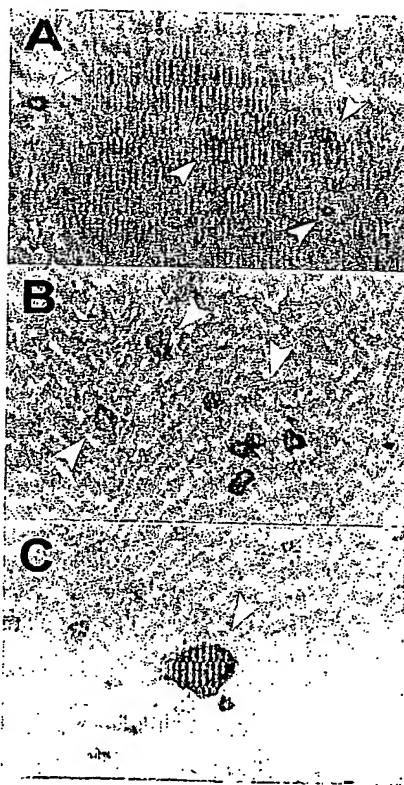
10-2003-0025158 21 April 2003 (21.04.2003) KR

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM,

[Continued on next page]

(54) Title: METHOD FOR IMPROVING GERMLINE TRANSMISSION EFFICIENCY OF AVIAN PRIMORDIAL GERM CELLS

(57) Abstract: The present invention relates to a method for improving the germline transmission efficiency of avian primordial germ cells (PGCs), and methods for producing avian chimeras and transgenic using it. The present method comprises the steps of (a) isolating primordial germ cells (PGCs) from an avian embryonic gonad; and (b) culturing said PGCs in vitro for at least 5 days. According to the present method, the germline transmission efficiency of PGCs can be dramatically improved in a feasible manner.





AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

- (84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,